

<b>Product #</b> CB19549 & CB19547	<b>Issue #</b> 2	<b>Issue Date</b> 20/11/2013	<b>Origination Date</b> 20/11/2013	<b>Originator</b> Patrick Smith	<b>Page #</b> 1/2
<b>Battery Specification</b>		<b>Nominal Ratings: 4.5v, 18Ah and 9v, 36Ah</b>		<b>Composition: 3S1P + 6S2P</b>	

NB: Actual voltage and capacity in use will be affected by various factors, including temperature, discharge rate, charge rate and method (if applicable), end point voltage, history (e.g. past use, storage) etc.



## WABC2033

Standard battery module for ABB AquaMaster 3 electromagnetic flowmeters. Designed in partnership with ABB.

Designed, developed and manufactured in the UK, Creasefield Flowmeter Batteries use traditional alkaline battery technology to offer cost-effective batteries suitable for standard length deployments with simplified transport rules.

Battery Details		N.B: Design life is dependent on usage and environment. Elevated temperatures will shorten battery life.	
Pack	Alkaline	Cell	Alkaline D cell
Design Life <sup>1</sup>	Standard	Commodity Code	85061011
UN38.3 TI-T8 Tested	Not applicable	UN Number	Not applicable
Lithium Metal Content	0g	Dangerous Goods Class	Not applicable
Packing Group	Not applicable	Labelling	ABB WABC2033 label
Country of Origin	United Kingdom		

Mechanical Details		N.B: All dimensions and weights are nominal. Creasefield Flowmeter Batteries are designed with a protective case and polyurethane filled enclosure intended to protect the pack against dust and water ingress. Care must be taken to protect the battery, cable and terminals.	
Length	147mm	Leads	1000mm
Depth	68mm	Connector	Souriau or Bulgin
Height	138mm	Case	Grey Plastic Case
Weight	2.9Kg	Encapsulation	Polyurethane
Dust Protection	Dust-tight	Liquid Protection	Protected against immersion

Electrical Details	Unit	Nominal	Minimum	Maximum
Discharge Current	mA	500		3000
Cut-off Voltage	V	2.4, 4.8		
Discharge Temperature <sup>2</sup>	°C	25°C	-20	+60

Protection Devices		N.B: These devices are designed to protect the pack in event of failure or abuse. Creasefield Flowmeter Batteries use non-rechargeable lithium batteries. Do not attempt to charge. Do not short circuit battery terminals. Polyswitch devices act as a self-resetting fuse.	
PCM Part No.		Polyswitch	RGE300
Fuse	none	Bypass Diode	None
Thermal Fuse	none	Reverse Current Protection Diode	1N5817

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**⚠ Outline safety warning: Use only within the allowed parameters.**

Do not short circuit the battery. Only use with ABB AquaMaster 3 equipment and in line with AquaMaster 3 instructions. Do not heat. Do not use above maximum temperatures indicated. Never crush, mutilate, puncture or abuse the battery. Do not dismantle the pack or disable any of the protective devices.

**⚠ You should also consult the following documents:**

- 1) Cell Data Sheet.
- 2) Material Safety Data Sheet.

**⚠ Do not connect multiple packs in series or parallel.**

**⚠ Do not use the battery if you suspect it may be faulty or damaged.**

**⚠ Do not attempt to charge the battery.**

**Storage:** Cell manufacturer data indicates approx. 93-96% of initial capacity available after storage for 1 year in nominal storage conditions. Elevated temperatures will increase capacity loss. Batteries must be stored in a cool, dry area out of direct sunshine. Prolonged storage at high temperatures will shorten battery life.

**New transport regulations affecting lithium, lithium-ion and/or lithium polymer batteries came into force during 2003 and 2004.**

**Disclaimer:** We do not claim to be experts in regard to transport regulations, shipping, packing etc. Users and prospective users of lithium, lithium-ion and/or lithium

polymer cells and/or battery packs should consult a qualified person for definitive information, e.g. a Dangerous Goods Safety Advisor. Creasefield Ltd, its owners, directors, employees and servants cannot accept any responsibility for the accuracy of the above information.

Standard battery modules for ABB AquaMaster 3 electromagnetic flowmeters by Creasefield Flowmeter Batteries use alkaline cells which are not subject to the stringent requirements of Dangerous Goods transport. CB18274 contains no lithium and are classed as non-hazardous. As such the special requirements for lithium battery shipping are not applicable.

1 Design life is dependent on usage and environment. Elevated temperatures will shorten battery life.

2 The battery may need to be derated at high and low temperatures. In particular, low temperatures will lower voltage response. High temperatures will increase self discharge and reduce battery life. See Duracell MNI300 Data Sheet for further information.